

**Notice of Allowability**

Application No.

10/779,864

Applicant(s)

KRIJNEN, EDWIN EDUARD  
NICOLAAS JOSEPHUS

Examiner

Samuel A. Turner.

Art Unit

2877

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the response filed 26 November 2007.
2. ☒ The allowed claim(s) is/are 1-24.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                     |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|  | 9. <input type="checkbox"/> Other _____   |

## DETAILED ACTION

### *Allowable Subject Matter*

Applicant's response filed 26 November 2007 has been fully considered and is persuasive.

Claims 1-24 are allowed in view of the prior art of record.

The following is an examiner's statement of reasons for allowance:

Applicant's arguments with respect to claims 1-6, 8-15, 21, and 23 rejected under 35 U.S.C. § 103(a) as unpatentable over Ukaji(6,285,457) in view of Peggs et al(CIRP-1999) have been considered and found persuasive. See page 3, lines 11-22 of Applicant's remarks. Claims 16, 17, 22, and 24 are dependent from either claims 8, 21, or 23 and are therefor also allowable.

### CLAIM 1:

With regard to claim 1, the prior art of record fails to teach the step of "providing a measuring laser beam that is directed substantially perpendicularly incident on a measuring mirror with a fixed position relative to said object such that a reference line normal to the measuring mirror makes a non-zero acute angle with said z-direction, said measuring laser beam being substantially retro-reflected and at least partly overlapping said reference beam to provide an interference signal, the object to be illuminated by a beam of radiation having an optical axis extending along the z-direction" in combination with the remaining limitations of claim 1.

## CLAIMS 2-6:

With regard to claim 2, the prior art of record fails to teach the step of providing an interferometer system including “at least one mirror, wherein said at least one mirror includes a measuring mirror with a fixed position relative to said object and having a mirror surface in which a reference line normal to the mirror surface makes a non-zero acute angle with said z-direction, the object having a surface that extends substantially in a plane perpendicular to the z-direction, the surface of the object to be illuminated by a beam of radiation having an optical axis extending along the z-direction” in combination with the remaining limitations of claim 2. Claims 3-6 are dependent from claim 2 and therefor also include the allowed subject matter.

## CLAIM 7:

With regard to claim 7, the prior art of record fails to teach the step of providing an interferometer system including “a set of at least two mirrors comprising at least one mirror which is a measuring mirror fixedly connected to said object and having a mirror surface in which a reference line normal to the mirror surface makes a non-zero acute angle with said z-direction and at least one separate mirror having a fixed position with respect to said apparatus” in combination with the remaining limitations of claim 7.

## **CLAIMS 8-19:**

With regard to claim 8, the prior art of record fails to teach an interferometer system including “at least one mirror, wherein said at least one mirror includes a measuring mirror with a fixed position relative to said object and having a mirror surface in which a reference line normal to the mirror surface makes a non-zero acute angle with said z-direction” in combination with the remaining limitations of claim 8. Claims 9-19 are dependent from claim 8 and therefor also include the allowed subject matter.

## **CLAIM 20:**

With regard to claim 20, the prior art of record fails to teach an interferometer system including “at least one mirror, wherein said at least one mirror includes a measuring mirror with a fixed position relative to said object and having a mirror surface in which a reference line normal to the mirror surface makes a non-zero acute angle with said z-direction” in combination with the remaining limitations of claim 20.

## **CLAIMS 21 and 22:**

With regard to claim 21, the prior art of record fails to teach the step of “providing a measuring laser beam that is directed substantially perpendicularly incident on a measuring mirror with a fixed position relative to said object such that a reference line normal to the measuring mirror makes a non-zero acute angle with

said z-direction" in combination with the remaining limitations of claim 21. Claim 22 is dependent from claim 21 and therefor also includes the allowed subject matter.

### **CLAIMS 23 and 24:**

With regard to claim 23, the prior art of record fails to teach the step of providing an interferometer system including "at least one mirror, wherein said at least one mirror includes a measuring mirror with a fixed position relative to said object and having a mirror surface in which a reference line normal to the mirror surface makes a non-zero acute angle with said z-direction" in combination with the remaining limitations of claim 23. Claim 24 is dependent from claim 23 and therefor also includes the allowed subject matter.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel A. Turner whose phone number is 571-272-2432.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr., can be reached on 571-272-2800 ext. 77.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Samuel A. Turner', with a stylized flourish at the end.

Samuel A. Turner  
Primary Examiner  
Art Unit 2877